AMENDMENTS TO THE SPECIFICATION

Please amend the paragraph beginning at page 1, line 3, as follows:

The present invention relates to an inverter control unit for motor driving, which includes a small-inductance reactor and a small-capacitance capacitor, and an air-conditioner employing this inverter control unit.

Please amend the paragraph beginning at page 1, line 7, as follows:

Various rectification methods employing diodes are hitherto known. For example, a prior art DC power supply device proposed in Japanese Patent Laid-Open Publication No. 9-266674 (1997) is shown in Fig. 8. Operation of the prior art DC power supply device is described below. In Fig. 8, an AC supply voltage of an AC power supply 1 is applied to an AC input terminal of a full-wave rectifier circuit having a bridge connection of diodes D1 to D4. An output of the full-wave rectifier circuit is applied to an intermediate capacitor C via a reactor Lin and electric charge of the intermediate capacitor C is discharged to a smoothing capacitor CD such that a DC voltage is supplied to a load resistance RL. In this case, at a load side of the reactor Lin, a transistor Q1 is connected to positive and negative DC paths connecting the full-wave rectifier circuit and the intermediate capacitor C such that the transistor Q1 is driven by a base driving circuit G1.

Please amend the paragraph beginning at page 2, line 10, as follows:

By the above described configuration, when the transistor Q1 is held in ON state in a portion or a whole of a phase interval in which the instantaneous value of the AC supply voltage does not exceed the voltage across the intermediate capacitor C, higher harmonic components ~~component~~

can be reduced and high power-factor can be gained while the prior art DC power supply device is prevented from becoming large in size.

Please amend the paragraph beginning at page 4, line 23, as follows:

Accordingly, by the above described configuration of the known motor control device, since the single resistor 36 can be used not only as the rush current preventing resistor but as the regenerative braking resistor, the large resistor can be eliminated, so that the known motor control device can be not only made compact in size and light in weight but produced at low cost.

Please amend the paragraph beginning at page 5, line 19, as follows:

Accordingly, an essential object of the present invention is to provide, with a view to eliminating the above mentioned drawbacks of prior art, an inverter control unit for motor driving, in which a DC voltage can be restricted to not more than a breakdown voltage of each of a plurality of driver elements, and an air-conditioner employing this inverter control unit.

Please amend the paragraph beginning at page 5, line 24, as follows:

In order to accomplish this object of the present invention, an inverter control unit for motor driving, according to the present invention, includes a rectifier circuit for converting into a DC power a first AC power inputted from an AC power supply, which includes a diode bridge and a reactor connected to an AC input side or a DC output side of the diode bridge and having a small inductance, wherein ~~and~~ the diode bridge has a plurality of first driver elements. An inverter converts the DC power from the rectifier circuit into a second AC power so as to output the second AC power to a motor and includes a plurality of second driver elements. Furthermore, a capacitor

for absorbing regenerative energy of the motor is connected between DC buses of the inverter and has a small capacitance. An overvoltage protecting circuit is connected between the DC buses of the inverter in parallel with the capacitor so as to be actuated prior to breakdown of the first driver elements of the diode bridge and the second driver elements of the inverter.

Please amend the paragraph beginning at page 7, line 10, as follows:

Figs. 6A and 6B are views explanatory of an operation of the conventional inverter control unit of Fig. 5;

Please amend the paragraph beginning at page 8, line 18, as follows:

Before operation of the inverter control unit 100A is described, operation of a conventional inverter control unit (Fig. 5) including a small-inductance reactor 9 and a small-capacitance capacitor 7 at the time of stop of a motor 11 is described with reference to Figs. 6A and 6B. In the conventional inverter control unit, in case the motor is operated normally, electric current flows in the direction of the arrow shown in Fig. 6A. On the other hand, when ~~in case~~ the motor 11 is stopped, magnetic energy accumulated by an inductance component of the motor 11 is turned into regenerative energy and thus, regenerative current I1 flows in the direction of the arrow shown in Fig. 6B via diodes D connected to switching elements S in parallel, respectively in the inverter 10 so as to charge the small-capacitance capacitor 7, thereby resulting in an increase of its charging voltage, i.e., a line voltage Vdc across DC buses. The ~~Since the~~ line voltage Vdc (peak) amounts to 1095 V as shown in Fig. 7 and thus, exceeds a breakdown voltage of 600 V of the small-capacitance capacitor 7 and the inverter 10, thereby resulting in breakdown of the small-capacitance capacitor 7 and the inverter 10. Meanwhile, Fig. 7 shows waveforms of the line voltage Vdc and the

regenerative current I1 obtained under conditions that a maximum current flowing through the motor 11 at the time of stop of the motor 11 is 51A and the small-capacitance capacitor 7 has a capacitance of 10 μF.